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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/587,249	06/02/2000	Seishiro Yoshioka	35.C5745 CIP/C2/D2/REI	6842

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EXAMINER

RAMSEY, KENNETH J

ART UNIT PAPER NUMBER

2879

DATE MAILED: 07/23/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/587,249

Applicant(s)

YOSHIOKA ET AL.

Examiner

Kenneth J. Ramsey

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,8,9,11,12,15,16,18-43,45 and 49-57 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6,8,9,11,12,15,16,18-21,23-43,45 and 49-57 is/are rejected.
- 7) ☒ Claim(s) 22 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) #10 6) ☐ Other:

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Reopening of Prosecution

This application has been reconsidered with regard to the issue of recapture. As indicated below some claims are now rejected due to recapture of surrendered subject matter. Prosecution as to the merits is therefore reopened.

Recapture

Test for recapture involves three steps (*Hester*, 46 USPQ2d at 1649-50):

1) a determination of whether claims are broader than the patent claims.

Claims,

2) a determination of whether the broader aspects of the reissue claim related to surrendered subject matter, and

3) a determination whether the reissue claims were materially narrowed in other respects related to the surrendered subject matter.

There is no question that the claims are broader than the patent claims, thus the issue is whether claims were broadened in respect to surrendered subject matter, and if so broadened if the claims were narrowed in other respects related to the surrendered subject matter. The examiner looks at the prosecution history to see what subject matter may have been surrendered by amendment or argument in response to a rejection of claims pending in the application that matured into the patent now the subject of this reissue application. Applicants argument that the broader aspects do not relate to subject matter canceled from claim 137 misses the point. Subject matter may be deemed surrendered in either of the following ways: an argument as to why a rejected claim is patentable, *Hester Industries, inc v. Stein, Inc.* 46 USPQ2d 1641 at

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1649, or any change to the claim in response to a rejection thereof *In re Clement* 45 USPQ2d 1161 at 1164. A review of the amendment and argument filed December 9, 1996 reveals the following facts:

A. Claim 141 was argued to be patentable over the patent to van Gorkom because "By contrast, in claims 141-143 of the present invention it is the fine particles between the electrodes that is the goal of the present invention. Whereas injected ions act as independent atoms [Gorkon et al, page 36, line 11], **the dispersed fine particles are bulky in nature** and do not act as individual atoms. This argument references the following language in claim 141: "**dispersing fine particles between said electrodes**". Thus claim 141 can not be broadened in this respect unless it is amended in another respect related to the surrendered subject matter.

B. Claims 137 and 144 were amended to overcome rejection thereof by the addition of the following language "**forming electrodes opposed to each on a substrate; forming between the electrodes an insulating layer in which fine particles are completely exposed; and etching the insulating layer so as to partially expose the fine particles**". Subsequently, the examiner required the applicant to add "**and in contact therewith**" to each claim after "between the electrodes". Therefore, the amended language as modified can not be broadened unless amended in another respect related to the surrendered subject matter.

Claims 6-11, 23-32, 36, 37, 43, 45, 49, 50, 52, 53, and 55-57 are rejected under 35 U.S.C. 251 as being an improper recapture of broadened claimed subject matter surrendered in the application for the patent upon which the present reissue is based.

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See *Hester Industries, Inc. v. Stein, Inc.*, 142 F.3d 1472, 46 USPQ2d 1641 (Fed. Cir. 1998); *In re Clement*, 131 F.3d 1464, 45 USPQ2d 1161 (Fed. Cir. 1997); *Ball Corp. v. United States*, 729 F.2d 1429, 1436, 221 USPQ 289, 295 (Fed. Cir. 1984). A broadening aspect is present in the reissue which was not present in the application for patent. The record of the application for the patent shows that the broadening aspect (in the reissue) relates to subject matter that applicant previously surrendered during the prosecution of the application. Accordingly, the narrow scope of the claims in the patent was not an error within the meaning of 35 U.S.C. 251, and the broader scope surrendered in the application for the patent cannot be recaptured by the filing of the present reissue application. These claims each broadened the patent claim language by clear omission of any recitation related to the above claim recitations that were relied upon to secure a patent. Although these claims are more narrow in other respects they do not avoid the recapture rule since none of these claims contain limitations that relate to the step of etching or the step of dispersing fine particles of conductive material between the electrodes which limitations were relied upon to secure the patent.

Claims 12, 15, 16, 18-21, 33-35, 38, 41, 51 and 53 rejected under 35 U.S.C. 251 as being an improper recapture of broadened claimed subject matter surrendered in the application for the patent upon which the present reissue is based. See *Hester Industries, Inc. v. Stein, Inc.*, 142 F.3d 1472, 46 USPQ2d 1641 (Fed. Cir. 1998); *In re Clement*, 131 F.3d 1464, 45 USPQ2d 1161 (Fed. Cir. 1997); *Ball Corp. v. United States*, 729 F.2d 1429, 1436, 221 USPQ 289, 295 (Fed. Cir. 1984). A broadening aspect is present in the reissue which was not present in the application for patent. The record of

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the application for the patent shows that the broadening aspect (in the reissue) relates to subject matter that applicant previously surrendered during the prosecution of the application. Accordingly, the narrow scope of the claims in the patent was not an error within the meaning of 35 U.S.C. 251, and the broader scope surrendered in the application for the patent cannot be recaptured by the filing of the present reissue application. See the prior rejection. Although these claims contain language relating to the dispersing of conductive particles between electrodes in a method for fabricating an electron emitting device, none of these claims recite the size of the particles (i.e. "fine particles" as found in each of claims 137, 141 and 144) and which was relied upon to secure a patent. Therefore, these claims also do not avoid the recapture rule.

Allowable Subject Matter

Claim 22 is objected to as it depends from a rejected claim, but would be allowed if made self contained..

Reasons for Indicating Allowable Subject Matter

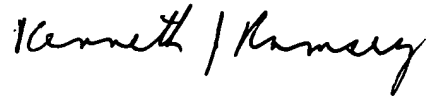
1. The following is an examiner's statement of reasons for indicating allowable subject matter, claim 22 avoids the recapture rule since this claim essentially recites limitations that require a dispersing of fine particles between two electrodes to form a field emission device. Thus this claim includes all of the recitations that were relied upon by applicant for obtaining allowance of patent claim 141 which was not amended during the prosecution of the original patent. Although the claim 22 is broader than claim 141 in that a semiconductor layer is not required, the semiconductor layer was not relied upon for patentability; see page 5, lines 18-20 of remarks filed 12/9/1996.

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Directions for Responses

Any formal response to this communication should be directed to examiner Kenneth Ramsey, Art Unit 2879, and either faxed to: 703-872-9318; or mailed to: Assistant Commissioner For Patents Washington, D.C. 20231

Technical inquiries concerning this communication should be directed to Kenneth J. Ramsey, (703) 308-2324 (voice), (703) 746-4832 (fax).

A handwritten signature in black ink, appearing to read "Kenneth J. Ramsey". The signature is written in a cursive, flowing style.

Kenneth J. Ramsey
Primary Examiner
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